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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,987	12/17/2003	Hielke Schoonewelle	081468-0307258	6444
909	7590	02/01/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			AKANBI, ISIAKA O	
P.O. BOX 10500			ART UNIT	PAPER NUMBER
MCLEAN, VA 22102			2877	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/736,987

Applicant(s)

SCHOONEWELLE ET AL.

Examiner

Isiaka O. Akanbi

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Drawings***

The examiner approves the drawings filed 17 December 2003.

***Double Patenting***

Claims 1-40 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 11013202. Although the conflicting claims are not identical, they are not patentably distinct from each other. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. The claims of the applications correspond to each other as follows:

10/736,987	11/013,202
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The difference between the present application and the copending application is that the present application claimed one substrate belonging to a group of substrates while the copending application claimed at least one substrate belonging to the group of substrates. The copending application claimed at least one substrate belonging to the group of substrates that would anticipate the claims of the present application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Boonman et al (2002/0167651 A1).

As regard to claims 1, 19 and 23, Boonman discloses a method/apparatus of determining a map of a surface comprising of the following (page 2, par. 0014)(fig. 1):

measuring a first part of a substrate belonging to a group of substrates; and based on a result of said measuring, computing a map of a second part of the substrate, the first part at least partially overlapping with the second part (page 5, par. 0060, line 4-8).

As to claims 2, 24 and 27, Boonman discloses said method further comprising determining, based on the map, at least one of a height and a tilt of at least one of the substrate and another substrate belonging to the group (page 2, par. 0014, line 25-29).

As to claims 3 and 25, Boonman discloses said method further comprising measuring at least one of a height and a tilt of the at least one of the substrate and another substrate belonging to the group (page 2, par. 0013, line 10-15), wherein said determining includes correcting a result of said measuring at least one of a height and a tilt (page 2, par. 0018, line 5-16).

As to claim 6, Boonman discloses wherein during said measuring, the substrate is positioned on a substrate table, and wherein during said determining, the at least one of the substrate and another substrate is positioned on at least one of the substrate table and a second substrate table similar to the substrate table (fig. 1)(page 5, par. 0061).

As to claim 7, Boonman discloses said method further comprising projecting a patterned beam of radiation onto a target portion of the at least one of the substrate and another substrate belonging to the group (page 4, par. 0048).

As to claim 8, Boonman discloses wherein said determining includes extrapolating the at least one of a height and a tilt based on the map (page 5, par. 0060).

As to claims 9 and 10, Boonman discloses said method further comprising using a sensor to measure at least one of a height and a tilt of the at least one of the substrate and another substrate belonging to the group (page 5, par. 0061).

As to claim 11, Boonman discloses said method further comprising storing the result of said measuring (page 5, par. 0060).

As to claims 12, 15 and 26, Boonman discloses wherein the second part includes a strip along an edge of the substrate (fig. 5).

As to claim 13, Boonman discloses wherein said measuring includes measuring along a line perpendicular to an edge of the substrate (fig. 1).

As to claim 14, Boonman discloses wherein said measuring includes measuring along a line that is at least one among perpendicular to and parallel to a scan direction during exposure of the substrate (page 5, par. 0060)(fig. 1).

As to claim 16, Boonman discloses wherein said measuring includes using a single spot level sensor (page 4, par. 0054).

As to claims 17, 18, 33, 36 and 40, Boonman discloses wherein the map is an average height map/an average profile map (page 5, par. 0056).

As to claim 20, Boonman discloses said apparatus further comprising a memory unit configured to store the map (page 5, par. 0060)(page 7, par. 0073).

As to claim 21, Boonman discloses wherein the processing unit is configured to determine, based on the map, at least one of a height and a tilt for at least one of the substrate and another substrate belonging to the group (page 7, par. 0073).

As to claim 22, Boonman discloses said apparatus further comprising a projection system configured to project a patterned beam of radiation onto a target portion of the at least one of the substrate and another substrate belonging to the group (fig. 1) (page 1, par. 0005).

Regarding claim 28, Boonman discloses a method/apparatus of determining a map of a surface comprising of the following:

measuring a first part of a substrate belonging to a group of substrates, storing a result of said measuring and based on the result of said measuring, computing a map of at least one of a second part of the substrate, the first part at least partially overlapping with the second part, and a part of another substrate belonging to the group (page 2, par. 0014, line 25-29)(page 5, par. 0060, line 4-8).

As to claim 29, Boonman discloses wherein said computing a map is performed during determining at least one of a height and a tilt of at least one of the substrate and another substrate belonging to the group (page 5, par. 0061).

Regarding claim 30, Boonman discloses an apparatus (fig. 1) comprising:

a sensor configured to measure a first part of a substrate belonging to a group of substrates, a memory unit configured to store a result of said measuring, a processing unit configured to compute, based on the result of said measuring, a map of at least one of a second part of the substrate, the first part at least partially overlapping with the second part, and a part of another substrate belonging to the group (page 5, par. 0056)(page 5, par. 0060)(page 5, par. 0073).

As to claim 31, Boonman discloses wherein said processing unit is configured to determine at least one of a height and a tilt of at least one of the substrate and another substrate belonging to the group, and wherein said processing unit is configured to compute the map during said determining (page 4, par. 0054)(page 5, par. 0060).

As to claims 32, 35 and 38, Boonman discloses said method comprising measuring a profile of at least a part of a structure arranged to support a substrate, computing a map of a substrate supported by the structure and storing the map (page 4, par. 0054) (page 4, par. 0056)(page 5, par. 0060).

As to claim 34, Boonman discloses said method further comprising, subsequent to said storing the map, determining at least one of a height and a tilt of a substrate supported by the structure based on the map (page 5, par. 0060).

As to claims 37 and 39, Boonman discloses said method further comprising determining at least one of a height and a tilt of another substrate based on the map (page 2, par. 0014)(page 5, par. 0060).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boonman et al (2002/0167651 A1) in view of the examiner Official Notice.

As to claim 4, the reference of Boonman discloses everything claimed, as applied to claim 2 above. The reference of Boonman is silent with regard to at least one of the substrate and another substrate is positioned on at least one of the chuck and a second chuck similar to the chuck. The examiner wishes to take Official Notice of the fact that the use of chuck/holder in optical field would have been well known. It would have been obvious to one having ordinary skill in the art at the time of invention to positioned plurality of substrates on a plurality of chucks for the purpose of fastened for centering, since these are well known chuck used advantages.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boonman et al (2002/0167651 A1) in view of Haginiwa et al (6,130,751).

As to claim 4, the reference of Boonman discloses everything claimed, as applied to claim 2 above, however the reference of Boonman is silent with regard to at least one of the substrate and another substrate is positioned on at least one of the chuck and a second chuck similar to the chuck. The reference of Haginiwa teaches of substrate that is positioned on a chuck (col. 4, line 1-10). It would have been obvious to one having ordinary skill in the art at the time of invention to provide at least one of the substrate and another substrate that is positioned on at least one of the chuck and a second chuck similar to the chuck for the purpose of chucking and fixing the substrates on the substrates Table.

As to claim 5, Boonman and Haginiwa disclose everything claimed, as applied to claim 4 above, in addition Haginiwa discloses wherein during said determining, the at least one of the substrate and another substrate is clamped to at least one of the chuck and the second chuck by at least one of the clamping mechanism and a second clamping mechanism similar to the clamping mechanism (col. 4, line 1-3).

#### **Additional Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art method/apparatus of determining a map of a surface that may anticipate or obviate the claims of the applicant's invention.

#### ***Conclusion***

#### **Official Notice**

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239



(CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well-known statement was made. See MPEP 2144.03, paragraphs 4 and 6.

### **Fax/Telephone Information**

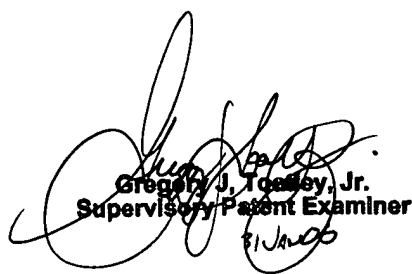
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi

January 19, 2006



Gregory J. Toatley, Jr.  
Supervisory Patent Examiner